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| 09/371,972 | 08/10/1999 | KONSTANTINE I. IOURCHA | PA1774US | 9872 |

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| EXAMINER | |
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| GOOD JOHNSON, MOTILEWA | |
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The time period for reply, if any, is set in the attached communication.

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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*Ex parte* KONSTANTINE I. IOURCHA,
CHUNG-KUANG CHIN, and ZHOU HONG

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Appeal 2007-2857
Application 09/371,972
Technology Center 2600

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Decided: December 21, 2007

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Before KENNETH W. HAIRSTON, MAHSHID D. SAADAT,
and SCOTT R. BOALICK, *Administrative Patent Judges*.

HAIRSTON, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. §§ 6(b) and 134 from the final rejection of claims 1 to 18 and 23 to 29.

Claim 1 is representative of the claimed invention, and it reads as follows:

1. In a graphics system, a computer-implemented method of rendering a graphic primitive, the graphic primitive having a plurality of sides that define the edge of the primitive, the method comprising:

receiving a signal from an interface, the signal comprising data about a plurality of vertices of the primitive and an independent variable;

determining a channel value for each of the plurality of vertices of the primitive using the data about the plurality of vertices and the independent variable;

randomly selecting an interior point within the graphic primitive;

selecting at least two side points located on a side of the graphic primitive;

determining an interpolated channel value with an interpolation engine for each of the at least two side points; and

determining a channel value at the randomly selected interior point by interpolation from the interpolated channel values of each of the at least two side points.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

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| Shochet | US 6,108,007 | Aug. 22, 2000 (filed Oct. 9, 1997) |
| Wood | US 6,204,856 B1 | Mar. 20, 2001 (filed Jul. 28, 1998) |

Foley, *Computer Graphics: Principles and Practice*, Addison-Wesley Publishing Company, 668 to 672, 736, and 737 (1997).

The Examiner rejected claims 1 to 18 and 23 to 29 under 35 U.S.C. § 102(e) based upon the teachings of Wood. The Examiner rejected claims 1 to 18 and 23 to 29 under 35 U.S.C. § 103(a) based upon the teachings of Foley and Shochet.

Appellants contend *inter alia* that the applied references neither teach nor would have suggested to the skilled artisan the receiving of a signal that comprises an "independent variable," determining a channel value for each of a plurality of vertices of a primitive using data about the plurality of vertices and the "independent variable," and "randomly" selecting an interior point within a graphic primitive as set forth in the claims on appeal.

Turning to the Appellants' disclosure for an understanding of the phrase "independent variable," we find that the disclosure describes an independent variable as "X (or Y) from the API" (Specification 19). The disclosure never explains how and under what conditions the API provides the independent variables X or Y (Specification 20). More importantly, the disclosure never explains what exactly constitutes an independent variable X or Y. With respect to the term "randomly," we can not find it in the originally filed disclosure.

In view of the lack of an explanation as to what constitutes an "independent variable," and the complete lack of a description in the originally filed disclosure of the term "randomly," we are not able to determine the metes and bounds of the claimed invention set forth in claims 1 to 18 and 23 to 29. Accordingly, the prior art rejections of claims 1 to 18 and 23 to 29 are reversed because a prior art rejection can not be sustained if the hypothetical person of ordinary skill in the art would have to make

speculative assumptions concerning the meaning of claim language. *In re Steele*, 305 F.2d 859, 862-63 (CCPA 1962).

## NEW GROUNDS OF REJECTION

Claims 1 to 18 and 23 to 29 are rejected under the second paragraph of 35 U.S.C. § 112 for indefiniteness because the metes and bounds of the disclosed and claimed invention can not be determined based on the use of the phrase "independent variable" in connection with a signal received from an interface in the claimed graphics system, and the use of the term "randomly" in connection with the selection of an interior point within the graphics primitive. According to *In re Moore*, 439 F.2d 1232, 1235 (CCPA 1971), any analysis under the second paragraph of 35 U.S.C. § 112 begins with a determination of whether the claims do, in fact, set out and circumscribe a particular area with a reasonable degree of precision and particularity when read in light of the application disclosure as they would be by one possessing ordinary skill in the art. As indicated *supra*, the claims on appeal fail to pass such a test as set forth in *Moore*.

Claims 1 to 13 and 16 to 18 are rejected under the first paragraph of 35 U.S.C. § 112 for lack of enablement. The skilled artisan would have to resort to undue experimentation to derive or select an "independent variable" due to the lack of an explanation in the disclosure as to how one of skill would know what constitutes such a variable. In the absence of any explanation in the disclosure, we find that the skilled artisan would have to resort to an undue amount of experimentation to be able to "randomly" select an interior point within the graphics primitive. In order to comply

with the enablement portion of the first paragraph of 35 U.S.C. § 112, the disclosure "must teach those skilled in the art how to make and use the full scope of the claimed invention without undue experimentation." *Bruning v. Hirose*, 161 F.3d 681, 686 (Fed. Cir. 1998).

Claims 1 to 18 and 23 to 29 are rejected under the first paragraph of 35 U.S.C. § 112 for lack of written description. As indicated *supra*, the term "randomly" selecting an interior point within a graphics primitive was not described in the originally filed disclosure. Under the written description portion of the first paragraph of 35 U.S.C. § 112, the Applicants must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991); *In re Kaslow*, 707 F.2d 1366, 1375 (Fed. Cir. 1983).

The decision of the Examiner is reversed[1].

This decision contains new grounds of rejection pursuant to 37 C.F.R. § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)). 37 C.F.R. § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 C.F.R. § 41.50(b) also provides that the Appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

[1] Our reversal of the prior art rejections does not mean that the Examiner's rationale for rejecting the claims over the prior art of record lacks merit.

> (1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .
>
> (2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

REVERSED; 37 C.F.R. § 41.50(b)

tdl/gvw

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